	MATERIAL PROPERTY.		Marine Marine								Number 1			10.000	
NAMES OF OWNERS. DESCRIPTION OF LANDS AND LOTS.	Out-Lots	Value of Improvements Value of Lots and Lands No. Square or	Amount of Tax for the current year, 1899	Barrett Law De- linquent Amount of Delin- quent Tax, Pen-	Cost of Advertising	Total Amount of Costs and Taxes Due	NAMES OF OWNERS.	DESCRIPTION OF LANDS AND LO	In-Lots	Value of Lots and Lands	Total Value of Taxables	Amount of Tax for the current year, 1899.	Earrett Law De-	Cost of Advertising.	Total Amount of Costs and Taxes Due
IRVINGTON (Continued.)								IRVINGTON (Continued.)						73428 (1)	
Poe, William A	75 44 3 143 21 20 14 98 	30 3 600 1650 225 75 7 1300 130 800 80 300 1000 130	0 .47 0 .31 0 .47 0 35.10 5 1.17 0 20.28 0 12.48 0 20.28 1.25 0 .62 0 .63	9.21 .48 1.68 22.62 1.45 26.54 17.39 38.60 3.83 .96	20 20 20 20 20 20 20 20 20 20 20 20 20 2	50 1.49 50 2.85 50 88.42 50 3.32 50 47.52 50 30.57 50 59.58	Stibbins, Thomas Stone, Matilda C. do Stowell, John M. Williams, Jacob R. Wilson, Deneatte Wilson, James H.	76259 H. & J. S. s e add 76654 Krewson et al. sub. Krewson's sub. You add 72674 Stanley's sub. J. J. R. & G. sub. add 72678 Walker's Sunnyside do 72681 Ritter's add, 70 ft on Wash st by 160 ft 72794 Holloway & Jennison's s e add 72796 Fairhurst's College Cor add 72799 J., J., R. & G.'s sub and add 72835 Chambers's 3rd sub	77 78 135 12 131	150 30 250 250 420 20 125 400	20 600 775 250 256 420 400 525 400 40	.32 12.09 2 .47 3.90 3.90 6.55 .31 8.19 1 6.24 .62	.47	20 20 20 20 20 20 20 20 20 20 20 20 20 2	50 1.49 50 25.19 50 1.88 50 9.42 50 9.42 50 14.48 50 2.36 50 24.37 50 10.94 50 2.67
do do do Severn, Henry Jr. Sewell, James W. Shade, Laura H. Shipman, Flora B. Shotwell, C. A. & H. C. Atkins. Shotwell, C. A. & H. C. Atkins. Sloan, Mary F. Smith, Ida G. do	12	4 65 200 26	0 .62 0 .63 5 2.73 0 .47 5 4.13 0 .62 0 12.48 0 10.92 0 20.28 0 .47 20 .31 20 .31	.96 .73 3.61 .71 6.39 .71 .19.30 .16.89 .56.46 .71 .71 .48	20 20 20 20 20 20 20 20 20 20 20 20 20 2	50 1.88 50 11.22 50 2.03 50 32.48 50 28.51 50 77.44 50 1.88 50 1.88 50 1.49	Cotton, Jeannette R	72999 Wellington	11 2 4 5 34 35 27 28	150 100 200 60 40 120 120	400 500 500 650 100 800 1000 40 150 270 100 220 200 300	7.99 1.23 1.23 1.23 1.23 1.23 1.30 1.74 .49 3.32 2.71	9.35 9.04 6.78 2.90 13.57 .87 .72 3.01 3.01 3.16	20	50 16.20 50 17.73 50 8.71 50 4.83 50 26.57 50 2.31 50 1.91 50 7.03 50 6.42 50 7.56
do	80 125 126 127 131 132 143 163 163 2 4 62 116 156 156 156 156 1	20 20 22 20 22 20 22 20 22 20 22 20 25	0 .31 0 .31 0 .31 0 .31 0 .31 0 .31 0 .31 0 .31 0 .32 0 .31	.48	20 20 20 20 20 20 20 20 20 20 20 20 20 2	50 1.49 50 1.49 50 1.49 50 1.49 50 1.60 50 10.60 50 10.60 50 9.42 50 2.60 50 1.49 50 1.49 50 1.70	Dalton, Allen Dalton, Ella Deford, Chas. W. (tr) do do do do Dungan, Kate W. E. do Emery, Mary J. (for life) McKenzie, Hattie E. Negley, Peter L. Smith, Ida G.	do d	17 17 22 23 24 25 14 15 28 15 15 15 28 15 15 28 15 15 28 15 15 28 15 15 28 15 15 28 15 15 28 15 15 28 15 15 28 15 28 15 28 15 28	50 50 50 50 40 10	100 115 50 75 100 150 30 30 500 550 100 150 150 185 175 225 25 65	2.16 3.43 9.43 9.43 9.43 9.792	6.95 .31 5.41 2.35 .46 .46 .39 1.43 3.93 4.02 1.60 .62	20 20 20 20 20 20 20	50 9.33 50 1.44 50 7.20 50 5.21 50 1.59 50 1.59 50 1.50 50 1.52 50 10.06 50 6.79 50 7.38 50 5.54 50 2.22 50 1.00

STATE OF INDIANA, MARION COUNTY,

Notice is hereby given that the lands and lots described in the foregoing list, or so much thereof as will satisfy the amount of taxes and assessments due thereon, respectively, or due from the owners thereof with interest, penalty and charges due at the time of sale, will be sold at the front door of the Courthouse in the City of Indianapolis, Marion County, State of Indiana, by the Treasurer of said county, on the

Second Monday in February, Being February 12, 1900.

Within the hours prescribed by law, and continued from day to day until all shall be sold. Witness my hand at Indianapolis, this 3d day of January, 1900.

HARRY B. SMITH,

Auditor Marion County, Indiana.

THE CHINAMAN'S DIET

Made the Subject of Agricultural De-. partment Investigation.

Philadelphia Record.

The common belief is that the Chinese nests, but, while not quite so unappetizing, it nevertheiess consists almost exclusively of foods with which other people are unfamiliar. The Chinese dietary is almost have the reputation of producing the greatest amount of food material from a given cultural experts are studying the principal Chinese food plants for the purpose of discovering whether any of them would make suitable or desirable additions to our vegetable gardens. Naturally the Chinese quarter of San Francisco, from its proximity and ready accessibility to Chinese ports, and the large food requirements of the unsalable outside of the narrow limits of grown in California, but almost all are imported directly from Canton

Anyone who has made a visit to our Racestreet colony must have been impressed with the high esteem in which watermelon ing usually eaten raw. Dried persimmons on decaying wood, similar to that often used in large quantities in San Francisco. This is not much worse than our highlyprized mushroom, of which it is a distant relation, but this fungus is decidely tough and woody, in which characteristics it differs materially from our delicate mushroom. Several varieties of seaweed, or algae, are eaten and highly prized. One form which resembles masses of horse hair, is treated with boiling water until it forms a gelatinous mass, and is then used as a thickening medium for various culinary preparations, one of the most esteemed of which is a combination of this vegetable with dried shrimps. These are a few of the "queer" food materials described in a pamphlet just issued by the Department of Agriculture and prepared by A. C. True, of the Office of Experiment Stations, entitled 'A Description of Some Chinese Vegetable

The more substantial food products consist largely of strange roots and tubers | St. Louis Globe-Democrat. which take the place of our winter vegetables. Their use of the arrowroot is not exclusive, its roots having been used long glad to take \$10 an acre any time during ago by the Indians of eastern America. When cooked in the same manner as potatoes it forms a very acceptable food, though one of a very pronounced and characteristic flavor. Nevertheless, it has become recognized as an article of food among the poorer non-Mongolian classes in an Francisco and large quantities of it are consumed by them

Food Materials."

The taro is a root highly prized for food by the natives throughout the tropics. The interior of the roots has about the consistency of a sweet potato, the starch grains being exceedingly small. According to Director True, from a dietetic standpoint, it by the option he had given. He could apparently offers no especial advantages over our commonly cultivated vegetables, but where it is eaten it seems to be a satisfactory substitute for them and the Anglo-Saxon residents of the tropics soon acquire a liking for it. Even in San Francisco-there | tween \$32,500 and \$75,000 for the old farm is a limited demand for it among the

The sacred lotus of the Egyptians, and even our latter day lily, are highly esseemed as food plants among the Chinese. The bulbs of the latter are considered more as a delicacy than as a staple article of is valuable for either its medicinal or nu- have been \$75,000. tritive qualities. Starch constitutes 50 per of the dry substance of its roots. Both of these articles are imported from Canton. The Hly bulbs sell at from 10 to 20 | Catholic Standard. cents a pound and are identical with the bulbs sold by our nurserymen for growing ornamental plants. The Japanese regard them as especially desirable food for invalids and convalescents. When used for that last week. this purpose the bulbs are only slightly

sugar. When simply boiled they are said to form a palatable food. Chinese sweet potatoes differ in shape size and color from the American product and are the only edible root to be found in the Chinese market with which Americans are at all familiar. Their chemical

ordinary American varieties.

True, "Is a palatable food."

bean," which is being experimentally investigated by the department, with the idea of introducing it into this country. The bean cheese, however, which is a pe in water, and are then reduced to protein and fat, being thus obtained. When is coagulated with crude salt, conkneaded into small cakes. It is sold either tained by compressing the former material. It is usually cooked in peanut oil before being eaten, and, in the opinion of Prof.

Chinese, and the latter fills the place that corn meal occupies in the South. It is becapable of being introduced with advantage into this country. Even the Chinese cabbage is entirely different from our own. and resembles a head of lettuce rather more than a true cabbage, consisting of a seeds are held as a holiday dainty, be- cluster of tender white leaves, with greatly thickened mid-ribs. Their egg-plant, a are not to be wondered at, although this is | noticeable feature of the Chinese vegetaan unusual method of preserving them, at | ble stands during the summer months, has least with us. The young shoots of bam- a perfectly smooth, white skin, but its boo are sold either pickled in brine or chemical analysis is similar to the Amercanned. A species of fungus that grows ican variety. Various gourd plants are also esteemed either as food or as condiseen about our woods, and known in some ments, principal among which are the parts of the country as "wood ears," is "leprosy gourd," the "dish cloth," or "towel gourd," and the Chinese preserv-

ing melon. The peculiar horned chestnut, which often sold by the fakirs on the streets and in the Chinese bazaars as a curiosity, on account of its shape, resembling as it does the head and horns of a cow, is used by the Chinese as an article of diet, being classed as one of the five food grains of China. When placed in water it readily germinates and produces the curious floating foliage characteristic of this genus of plants.

Chinese millet, which, it is believed, will prove an important addition to our cereals, and various native fruits, nuts and dried flowers, in addition to the articles of food named above, make up practically the whole of the Chinese vegetable diet.

Happiness Spoiled by an Option.

A farmer in the lead region of Missouri had 500 acres for which he would have been the last twenty years. He would probably have thrown in his whole crop at the figure. One day recently some men came along and asked the privilege of boring a hole in the ground. After they had gone down some distance they gave the old farmer \$1,000 in cash for the privilege of purchasing the farm at \$65 an acre. The option was to run until a certain day at noon. If the purchasers were not on hand at that time the \$1,000 was to be forfeited. This party of prospectors disappeared. peared on the scene. After some further exploration the second party offered \$150 an acre for the farm. The old man was bound not sell until the hour had expired. state of mind was bad enough to begin with, But as the day approached his misery intensified. He could not eat. He could not sleep. The thought of the difference be- described. Into the causes of this motion was torturing the man who had grown old say that it is due to the planets' revolution and bent in trying to wring a living out of | in their annual orbits about the sun. This it. What added to the strain was the tardi- makes them change their positions in ness of the option holders. No one appeared to close the deal at \$65 an acre until within | ferent parts of the distant vault of the sky thirty minutes of the time the option ex- at different dates of observation. The old man has lost all of the endist, while almost every part of the lotus | the recollection that it might just as well oyment in the \$32,500 which he received in

Great Memory.

"I'm doing very well at school."

"I'm glad to hear it. What's your strong-"Memory. I won a book as a prize for "What sort of a book was it?" cooked and are eaten after the addition of . "I don't recall the name of it now."

PLANETS AND STARS.

How to Tell Them Apart-Test for Naked-Eye Observers.

New York Evening Post. some shepherd, tending his flocks, perhaps ipon the plains of Chaldea, surely in the easily distinguish a planet from a star remains the same as that which must have planet tells the history of an epoch-marking discovery just as surely as though a written record of its making had been the serried array of heaven's night. It is ever the characteristic of genius to disentangle the simple basic phenomena of man who first noted the planets' peculiari- A short talk with Fletcher, who is as well ty of traveling among the other stars, and known as any of the exponents of the art, studded with the so-called fixed stars. So | ate most of the callers: far as the naked-eye observer can tell, they year to year and from generation to genereast, you will see them slowly climb the sky and again descend and set in the west, always forming precisely the same geometrical figure. Nor is this all. If the were searched with care, just the same triangle or quadrangle of stars would be portant events unfold themselves found described as having always been seen to rise and set, then as now, so long as men have watched the sky. But suppose there were a planet within the center of our triangle of stars. As we watched night after night we should see the planet slowly change its place within the triangle. By imperceptible degrees but with a continuous and cumulative motion the planet would approach one of the triangle's sides and at length would pass far beyond and away. It is thus that the first planet must have been differentiated from the stars, and thus again the naked-eye astronomer of to-day can best proceed to elementary planetary study. Note care-

diagram, their positions with respect to neighboring stars and you will speedily come into possession of evidence as to the planetary nature of the body under observation. One planet detected in this way will afford more satisfaction and encouraging instruction to the beginner in astronomy than much study by the aid of books or teachers. It is true that other characteristics of the planets will help in their identification by the unaided eye. In the first place, the planets are usually very bright, though not stars. Again, the planets are said not to sider this strictly accourate, though it is scope the only sure test is the presence of tions formed the warp and woof of his such motion among the stars as we have | nature.

fully the heavenly bodies you suspect of

being planets. Fix in your mind, or on a

A Phrase in History.

it is not our intention to enter. Suffice it to

space, and so we see them projected on dif-

The celebrated dying injunction of Lawrence, "Don't give up the ship!" has gone into history and become fixed there as probably be made with a limit of error one of the heroic utterances of patriotic amounting to only a fraction of a wavecommanders. Yet we find its authenticity length of light." "How much would that questioned at this late day. An aged correspondent writing to the Hartford Cou- the customer wanted the straight-edge for rant from Waterbury, in Connecticut, gives | a scraper, and that an error of one-sixtythis account of its origin. He says: "Somewhat more than fifty years ago it sible for his purpose.

a mutual friend a daughter of the late Major Benjamin Russell, for many years editor of the Boston Centinel. She was a raconteur, and she told me a number of anecdotes of her father, who was a strongly individualized and notable character for

said the man. 'Oh, he did,' said the major, 'I'll make him say it'-and he did-

PALMISTRY THE FAD.

Want to Know the Future.

out by different practitioners in the realm hibited to the eye of a casual observer. So later adepts in that side science of occultwe shall not err in ascribing genius to the | ism whose basis is the lines of the hand.

"They care little for the science of palmall retain precisely the same relative po- istry. What they wish to know is what the her nuptials with the young King. Beauti- of merchandise. sitions with respect to one another from future holds of weal or wee and how to ful children strewed roses through the The greatest amount of rose oil, according year to year and from generation to genercompass their end. I have often said that a ation. If you select a certain triangle or successful reading is like a successful phoquadrangle of stars as they rise in the tograph-if the picture looks the way one wishes it to look it is good, first class. If the reading runs the favorable way it is splendid, for it is a matter of personal selfishness after all. In reality the hand ancient records of naked-eye observations | holds the entire history of each life, and changes from time to time as the more im-

> "Who comes to consult? Why, everybody, from the most astute lawyers, 'leaders of fashion, popular actresses, to the hard-headed men of business, the desire being 'only to know,' and there is a great satisfaction in feeling that as they return again and again some help must be given. some good done.

> 'Does palmistry have any relation to phrenology, astrology or physiognomy? The same as one phase of truth to another. Nature never contradicts herself, I think. To me, however, palmistry comes to a nearer solution of the problem than anything else."

Goodness and Manhood.

Carina C. Eaglesfield, in Home Companion. The older I grow the more I revere goodness-just plain everyday goodnesshaving nothing heroical nor spectacular in it, for I think this is the gift of which God has been the least prodigal. Intelligence without goodness may mean nothing higher than a prize-fighter, but goodness with strength and intelligence makes a man as he was created to be, an image of the Godhead. The most symmetrical man of this century was Mr. Gladstone, and his moral nature was as sweet and wholesome as his intellect and body were strong. In mind, in heart, in soul, in everything but physique and inches, he was a giant. But the salient feature in Gladstone's characcertainly a fact that the twinking of the ter, and what lifts him above every conplanets is less than that of a majority of temporary, was his moral earnestness. He the stars. But in the absence of a tele- was a good man, and his religious convic-

"Straight Edge" an Impossibility.

One of the difficult problems in practical mechanics is to make a "straight-edge." How difficult it is may be judged from an incident which occurred in the shops of J. A. Brashear, the astronomical instrument maker. A customer asked Mr. Brashear what would be the price of "a perfect straight-edge of glass thirty-six inches "It can't be made absolutely perfect," said Mr. Brashear, "but it could cost?" "About \$40,000." It turned out that fourth of an inch would have been insen

THE STORY OF ATTAR OF ROSES

Its Manufacture.

It was in the days of the grandmothers or possibly even the great-grandmothers that every fair dame, in her silk-quilted petticoat and gay-colored bouffant draperles, with her picturesque elaborate coffure, least one of the sweet-scented vials. They were such pretty little things of

clear glass, with quaint designs in gold on the outside, long and slender, a pleasant size to hold in any lady's fair white hand, and suggesting all sorts of mysterious broker, professional man and the woman of perfumes are interesting enough in themselves for at least a passing mention First on the list comes the Gul Rea Zee, a Greek perfume named after the Persian festival called the Scattering of the Roses, in designating his discovery an epoch- brought to light the following information | the festival which was in process of cele- | The pomade is used largely for perfumes making one. The whole sky is thickly concerning the aims and motives that actu-Delhi for Cashmere for the celebration of frice, sachets and more practical articles musk fram Khoten had passed through it." There is a sandal-wood perfume, reminiscent fads and her love letters. The young wom-

> There is Portocal Auzania, orange the girl of to-day has is a cream that her these are interesting, but they do not have | history. the same fascination as the quaint little bottles of attar of roses, in every drop of which was the imprisoned fragrance of acres of beautiful roses. There is one rose that is devoted to the

so much a household treasure as in years

manufacture of the attar or the essential oil, the beautiful red damask rose, the Rosa Damascena, the very same rose with which the young King had arches made and thrown from hedge to hedge for two miles outside of Cashmere along the road which Lalla Rookh passed on her journey, "those rarest roses from which the Attar Gul, more precious than gold, is distilled. Bulgaria is the chief country from which comes the attar, Kazanalik being the center and principal market place, while a very considerable amount is also made in Germany. From Persia, the land of romante and roses, there should be a superior quality of the attar, but although it is made there, the romance which surrounds it does | things! Do read me a little. not make it at all superior to that from other lands. France has a little, but superior, attar. It is made in other countries, but in comparatively small quantities. The process of manufacture after the fields have been brought to a perfection of bloom is comparatively simple. Much depends upon the climatic conditions for the perfect condition of the flowers. After a mild winter, with a cool, damp, early summer, not too wet or too hot, though it may be necessary to resort to artificial irrigation to bring the plant to perfection, the flowers come out in fine condition, and a southern wind during the picking in Bulgaria will ruin the crop even there. Hot and ablefi but not so fatal. The picking is an interesting process. It

is done by the poorer classes of the people Each blossom is picked just below the calvx, thrown into big baskets provided for the purpose, and then carted away to the distillery, which is near at hand. The flowers must be used immediately, or they sour and lose their fragrance. The picking is done in June and July, and lasts prac-tically a month—from the middle of one month to the middle of the next. In the vicinity of the rose field in Ger- to his doctor.

many the chools are closed during the season of the rose picking, and the childto the work, receiving a nominal sum for their labors. There is no work done in the middle of the day, the picking being done in the early morning and in the evening

the roses will not deteriorate so article, and it may not be considered adul-terated in a retail shop when it is diluted. Gul is more precious than gold, it is by no

combined and distilled again and the liquid used for perfumes is made by covering the eparated from the leaves and hermetically-sealed cans, where it will reuse it is combined with frozen spirits of cologne, when it is known as rose pomade. rose confectionery and is found in denti-

The greatest amount of rose oil, according city was as fragrant as if a caravan of | to France and America. Those two coun-Aries are grouped together in the statistics and received one year 1,564 kilos. Constanof the sandal-wood boxes, also treasures tinople is next at 478 kilos, England and of the grandmothers, sweet scented and Germany following with 466 and 425 kilos, beautifully carved, in which she kept her respectively. Italy took the least, only three kilos in the year. The Turkish governan of to-day takes the perfume in this ment, favoring the manufacture, has grantform instead of in the box, which, like the ed the rose farmers exemption from taxes attar of roses, is still in existence, but not and internal revenue for several years, The attar of roses is put up for export in different ways. Queer copper containers, tin lined, shaped something like a canteen som; Viorenta oren, violet; Chiche, bou- and in different sizes, holding ten, twenty, quet; and another Eastern treasure that or eighty ounces, are used somewhat. The cans are covered with parchment-like material, and carefully sealed. In more attracthave had, one that it is guaranteed is made ive form it comes in large glass bottles, from the very same recipe as that used by the size and shape of the bottles that fig-There is one great trouble with attar of

do with the loss of popularity of the little straight bottles that the grandmothers loved. It is easy to add to it other and cheaper flowers than the beautiful Rosa Damascena of the days of Lalla Rookh, and while the price is less the perfume is less also. It is difficult to find the pure ar-

Scotch as She Is Wrote.

Mrs. Hohmboddie-What are you reading that absorbs you so? Mr. Hohmboddie (looking up from his book)-It's a new Scotch novel. Mrs. Hohmboddie (with enthusiasm)-Oh. I'm so fond of those dear dialect

Mr. Hohmboddle-Can you understand it? Mrs. Hohmboddie (loftily)-Can I understand it? Well, I should hope anything you can understand need not be Greek Mr. Hohmboddie-No; but it might be

Mrs. Hohmboddie-Go on; just read where you are at. Mr. Hohmboddie (reading)-"Ye see, Elpsie," said Duncan, doucely, "I might hae mair the matter wi' me than ye wad be spierin'. Aiblins ma een is a bit dazzlit, be gaein'; an' diy ye no' hear the dirlin' o'

me gaein' it mair words?" Mrs. Hohmboddie-Stop, for goodness' sake! What in the world is the creature trying to say?

Mr. Hohmboddie—He's making a declaration of love?

Mrs. Hohmboddie—A declaration of love?

I thought he was telling a lot of symptoms last be exercised with adequate instruc-

GREAT TELESCOPES.

Not Everything Depends on Size of

Instrument.

New York Evening Post. We have just received from Germany pamphlet issued by the observatory at Potsdam, near Berlin, describing ceremonies connected with the official installation of a new and large telescope. It appears that the Kaiser himself has become sufficiently interested in astronomy to have ordered the immediate construction of such an instrument, after it had been repeatedly asked by the astronomers and refused by successive imperial ministers from motives of economy. The Kaiser even attended permeans the most precious of perfumes, for sonally the dedication ceremonies at Potsdam, and seems to have listened to the speeches made upon that occasion. These were, as is only right and proper, somewhat complimentary to the observatory and the noble patron who honored it by his presence. Perhaps they might even be said to

does not appear to be a crime in Germany. But setting aside the rather humorous aspect which these official foreign ceremonial occasions generally exhibit to an American we cannot too seriously emphasize the importance to astronomical progress of this genuine interest on the Emperor's part. Germany deservedly stands very high among the nations as a cultivator of astronomy. But there is one class of researches that it has been quite impossible to undertake there. These require observations with a telescope of great size and light-gathering power; and such a telescope Germany, has never had. Our own country has always led in this respect. It was in the Clark workshop at Cambridgeport, Mass., that the first modern great telescope was made, and ever since the successive est telescopes have been supplied with lenses from that same workshop. The United States Naval Observatory, the Lick Observatory in California and the new Yerkes Observatory near Chicago have each in turn possessed the world's greatest telescope, and foreign astronomers have always been compelled to content themselves with lesser instruments. But they have not been far behind us, with the single exception of the Germans. The Yerkes telescope at Chicago has a diameter of forty inches, and the Lick has thirty-six. Great Britain has one the beauties in the harems of Turkey, and | ured in what was known at one time as a | of twenty-eight inches, Russia one of thirty that has been used by them since as long gilt design very much like those of the and now the new German telescope enters ago as the days of the Roman empire. All familiar little attar of rose bottles of past the competition with a diameter of thirtytwo inches. The United States still leads, therefore, with the two largest instruments roses, and this may have had something to but all the telescopes mentioned are o sufficient size to attempt work requiring great light-gathering power. But so much depends upon the sensitiveness of the astronomer's eye, and upon his skill in observing, that we are not necessarily sure of doing more with our great instruments than can be accomplished with the slightly similar European ones. To make an astronomical observation, three things have to be brought into the same straigth line, the star, the telescope and the human eye. The man behind the telescope counts heavily in the final result. The Potsdam Observatory, though only about twenty-five years old, was the first one devoted exclusively to the comparatively new science of astrophysics. Instead of the older investigation of the stars' motions and positions, the astrophysicis

studies with the spectroscope the chemica constitution of the heavenly bodies and such other characteristics as can be determined with that instrument. A particular specialty has been made at Potsdam of photographing spectra, for the measurement of stellar velocities of motion in space. It is not too much to say that the perfection of the methods now used for this purpose is due very largely to Potsdam. But it is precisely this extremely interesting and important kind of observation that requires a telescope of large large amount of attar is the result. A hot | an' am hearin' the poolses thuddin' in ma | size. So, while Vogel and Scheiner at ears, an' ma toongue is clavin' when it sud | Potsdam have been able to devise and perfect new methods of observation, they dry weather during picking is also unfavor- | ma hairt an' feel the shakin' o' ma hond | have been limited to using these methods this day gin I gat a glimpse o' ye, sair upon the very brightest stars. Now, hirplin like an auld mon? Div ye nae through the intelligent interest of the Emguess what's a' the steer, hinney, wi'out | peror, they are enabled to extend the work. Statistical information about the velocities of a large number of stars is essential to the solution of problems relating to the construction of the universe. This wa